

CSS(Cascading Style Sheets)

1: Introduction to CSS

1.1.What is CSS?

- 1.1.1. Introduction to Cascading Style Sheets
- 1.1.2. The Role of CSS in Web Design

1.2.CSS Syntax and Rules

- 1.2.1. CSS Selectors and Properties
- 1.2.2. Inline vs. Internal vs. External CSS

2: CSS Basics and Selectors

2.1. Selectors

- 2.1.1. Type Selectors
- 2.1.2. Class and ID Selectors

2.2.CSS Properties

- 2.2.1. Color and Background
- 2.2.2. Fonts and Text Formatting

2.3.CSS Box Model

- 2.3.1. Margins, Padding, and Borders
- 2.3.2. Width and Height

3: CSS Layout and Positioning

3.1.Document Flow and Positioning

- 3.1.1. Normal Flow vs. Positioned Elements
- 3.1.2. Floating and Clearing Elements

3.2.Flexbox Layout

- 3.2.1. Flex Container and Items
- 3.2.2. Flexbox Properties

3.3. Grid Layout

- 3.3.1. Grid Container and Items
- 3.3.2. Grid Properties

4: Responsive Web Design with CSS

4.1. Media Queries

- 4.1.1. Defining Media Query Breakpoints
- 4.1.2. Responsive CSS Rules

4.2. Viewport Meta Tag

- 4.2.1. Controlling the Viewport
- 4.2.2. Mobile-First Design Principles

4.3. Responsive Images

- 4.3.1. Image Sizing and Optimization
- 4.3.2. Picture and Source Elements

5: CSS Transitions and Animations

5.1. CSS Transitions

- 5.1.1. Transition Properties
- 5.1.2. Hover Effects and Animation

5.2. CSS Animation

- 5.2.1. Keyframes and Animation Properties
- 5.2.2. Animation Timing and Easing

6: Advanced CSS Topics

6.1. Pseudo-classes and Pseudo-elements

- 6.1.1. :hover, :active, :nth-child
- 6.1.2. ::before and ::after

6.2. CSS Variables (Custom Properties)

- 6.2.1. Defining and Using CSS Variables
- 6.2.2. Dynamic Theming with Variables

6.3. CSS Preprocessors (e.g., Sass)

- 6.3.1. Installing and Configuring Sass
- 6.3.2. Variables and Mixins in Sass

7: CSS Best Practices and Optimization

7.1 Code Organization and Maintainability

- 7.1.1. File Structure and Naming Conventions
- 7.1.2. CSS Methodologies (e.g., BEM)

7.2. CSS Optimization

- 7.2.1. Minification and Compression
- 7.2.2. Reducing Repaints and Reflows

8: CSS Frameworks and Libraries

8.1. Bootstrap

- 8.1.1. Introduction to Bootstrap
- 8.1.2. Bootstrap Components and Grid System

8.2. Other CSS Frameworks

- 8.2.1. Foundation, Materialize, and Bulma
- 8.2.2. Pros and Cons of CSS Frameworks

9: CSS in Real-World Web Projects

9.1. Web Page Styling

- 9.1.1. Styling a Landing Page
- 9.1.2. Customizing a Blog Design

9.2. CSS for Web Applications

- 9.2.1. Styling Web Forms and Tables
- 9.2.2. CSS in Single-Page Applications (SPAs)

10: Final Project and Course Review

10.1. Project Proposal and Planning

- 10.1.1. Designing a Web Project
- 10.1.2. Implementing Responsive Design

10.2. Implementation and Presentation

- 10.2.1. Building the Web Project
- 10.2.2. Final Project Presentation